

its Proceedings. Among the more valuable complete sets may be mentioned the Bulletin of the Torrey Botanical Club, Science, the American Naturalist, the Report of the Missouri Botanical Garden, the Annals of the New York Academy of Sciences, the Bulletin of the American Museum of Natural History, the Reports of the Smithsonian Institution and of the U. S. Geological Survey, etc. Many of these are not to be found elsewhere on Staten Island.

The library has recently been enriched by a donation of 150 miscellaneous scientific books from Dr. Arthur Hollick, and will also receive as a deposit about the same number of volumes from the library of the curator.

THE BOTANICAL SYMPOSIUM, AT NEWTON, NEW JERSEY

The fourth annual Botanical Symposium was held, as previously announced in TORREYA, at Newton, Sussex County, New Jersey, during the week of July 1-7, 1907, with headquarters at the Hotel Waldmere. Beside a few local visitors, there were twenty-five in attendance.

Monday, July 1.—Most of the party arrived on the afternoon of the first day and had time for a short walk in the immediate vicinity, so that at the first meeting, held in the evening, several interesting finds were reported. Limestone ridges running north-east and southwest through the region of Newton afford conditions favorable to the growth of some interesting plants. Among these were noted *Arabis laevigata* (Muhl.) Poir., *Quercus acuminata* (Michx.) Houba, *Asplenium platyneuron* (L.) Oakes, *A. Ruta-muraria* L., *A. Trichomanes* L., *Camptosorus rhizophyllus* (L.) Link, *Filix fragilis* (L.) Underw., *Pellaea atropurpurea* (L.) Link, and *Woodsia obtusa* (Spreng.) Torr. In the swampy ground there were *Alnus incana* (L.) Willd., *Betula pumila* L., *Equisetum fluviatile* L., and *Mochringia lateriflora* (L.) Fenzl. The following were noted as weeds: *Anthemis arvensis* L. (common), *Lepidium apetalum* Willd., *Pentstemon Digitalis* (Sweet) Nutt. (abundant), and *Scrophularia leporella* Bicknell. *Malva*

moschata L. was noted as an escape. Dr. Philip Dowell presided at the evening meeting, which was devoted largely to the reading of the report of the previous year's Symposium, at Mountain Lodge in the Adirondacks, and to various business items. At the request of the permanent recorder, Mr. Joseph Crawford, the report was read by Mr. Lee Sowden. A program committee, consisting of Messrs. Stewardson Brown and B. W. Griffiths, was appointed to plan the excursions and to make the necessary arrangements for each day's trip. Messrs. Lee Sowden and S. Van Pelt were appointed official recorders of the finds reported by members of the Symposium from the vicinity of Newton. Mrs. H. A. DeCoster and Mr. Bayard Long were appointed official photographers.

Tuesday, July 2. — Some of the hill country east and the chain of lakes northeast of Andover Junction were visited. Mr. Brown presided in the evening. The following are some of the plants noted: *Anchistea virginica* (L.) Presl, *Botrychium simplex* E. Hitchcock, *Woodsia Ilvensis* (L.) R. Br., *Achroanthes monophylla* (L.) Greene, *Galcorchis spectabilis* (L.) Rydb., *Leptorchis liliifolia* (L.) Kuntze, *L. Loeselii* (L.) MacM., *Capnoides semper-virens* (L.) Borck., *Pyrola secunda* L., *Ranunculus delphinifolius* Torr., from the hill country east; and from the lake region, *Adlumia fungosa* (Ait.) Greene, *Astragalus carolinianus* L., *Carex Buxbaumii* Wahl., *C. conoidea* Schk., *C. flava* L., *C. granularis* Muhl., *C. lanuginosa* Michx., *C. leptalea* Wahl., *C. longirostris* Torr., *C. riparia* Curtis, *C. tetanica* Schk., *Cornus circinata* L'Her., *C. stolonifera* Michx., *Geum rivale* L., *G. strictum* Ait., *Naumburgia thyrsiflora* (L.) Duby, *Parnassia caroliniana* Michx., *Polygonum amphibium* L.

Wednesday, July 3. — The excursion was to Culver's Lake and Culver's Gap, about twelve or thirteen miles north and west of Newton. Especially interesting was the flora of the mountain at the Gap. Dr. N. L. Britton was chairman at the evening meeting. The following are some of the interesting plants reported from the mountain: *Amelanchier spicata* (Lam.) Dec., *Apocynum Milleri* Britton, *Aralia hispida* Vent., *Azalea canescens* Michx., *Castilleja coccinea* (L.) Spreng., *Polygala polygama* Walt.,

Prunus cuneata Raf., *P. pennsylvanica* L. f., *Ranunculus fascicularis* Muhl. (?), *Sorbus americana* Marsh., *Viburnum pubescens* (Ait.) Pursh. Among other plants noted on the way and in the region about the lake are *Acer spicatum* Lam., *Asclepias verticillata* L., *Blephariglottis grandiflora* (Bigel.) Rydb., *Botrychium neglectum* A. Wood, *Calla palustris* L., *Panicularia Torreyana* (Spreng.) Merr., *Rubus neglectus* Peck, *Salix tristis* Ait., *Utricularia vulgaris* L., *Viola blanda* Willd., *V. Porteriana* Pollard, *V. rotundifolia* Michx. Dr. Britton and others commented on the similarity between the flora of this mountain and other mountains in the region, and comparison was made with the xerophytic vegetation of sandy regions nearer the coast.

Thursday, July 4. — In the morning the region southwest of town was examined, some going beyond Springdale. In the afternoon most of the party visited a tamarack swamp a short distance north. Dr. G. N. Best presided at the evening session, when a number of interesting finds were reported: *Acer nigrum* Michx., *Arabis hirsuta* (L.) Scop., *Arisaema pusillum* (Peck) Nash, *Asplenium ebenoides* R. R. Scott (2 plants beyond Springdale), *Carex cephalophora* Muhl., *C. filiformis* L., *C. laxiflora blanda* (Dewey) Boott, *C. oligocarpa* Schk., *C. xanthocarpa* Bicknell, *Cocloglossum bracteatum* (Willd.) Parl., *Corallorhiza multiflora* Nutt., *Crataegus Porteri* Britton, *Cypripedium hirsutum* Mill., *C. parviflorum* Salisb., *C. reginae* Walt., *Dryopteris Clintoniana* (D. C. Eaton) Dowell, *D. Goldieana* (Hook.) A. Gray, a new *Dryopteris*, two species of *Dudleya*, *Erysimum cheiranthoides* L., *Fraxinus nigra* Marsh., *Hypopitys lanuginosa* (Michx.) Nutt., *Limodorum tuberosum* L., *Lysias Hookeriana* (A. Gray) Rydb., *Meibomia grandiflora* (Walt.) Kuntze, *Melanthium latifolium* Desr., *Mentha aquatica* L., *Menyanthes trifoliata* L., *Myrica Gale* L., *Orontium aquaticum* L., *Picea Mariana* (Mill.) B. S. P., *Pogonia ophioglossoides* (L.) Ker, *Rubus americanus* (Pers.) Britton, *Rumex Britannica* L., *Salix Bebbiana* Sarg., *S. candida* Fluegge, *S. petiolaris* J. E. Smith, *Sarracenia purpurea* L., *Utricularia cornuta* Michx., *U. intermedia* Hayne. An interesting discussion occurred on mutants in connection with *Arisaema pusillum*, in which Dr. Britton, Mr. Brown, Dr. Ida Kellar, and others took part.

Friday, July 5. — The day was spent on a trip to Swartswood Lake. Mr. Joel Carter presided at the evening session. Among the plants reported may be noted the following: *Batrachium longirostre* (Godr.) F. Schultz, *Boltonia asteroides* (L.) L'Hér., *Botrychium neglectum* A. Wood, *Carex setifolia* (Dewey) Britton, *Celtis georgiana* Small, *Conopholis americana* (L. f.) Wallr., *Cypripedium hirsutum* Mill., *Galeorchis spectabilis* (L.) Rydb., *Phegopteris Phegopteris* (L.) Underw., *Salix prinoides* Pursh, *Taraxacum erythrospermum* Andr. Dr. Britton reported *Polygala paucifolia* Willd., showing good fruit, both aërial and subterranean, also one tree of *Diospyros virginiana* L. and a peculiar form of *Ilex verticillata* (L.) A. Gray (?). The terrestrial form of *Ranunculus delphinifolius* Torr. was observed on the muddy border of a pond.

It is interesting to note the finding of the persimmon in this latitude, and it may be of interest to add that during several years of botanizing around Allentown, Pa., I found just one tree of this plant, and that along the roadside in a similar situation to the one noted by Dr. Britton.

Saturday, July 6. — The day was spent in an all day trip to Round Pond, some thirteen miles west of Newton. This lake is at a considerable elevation, and it was expected that the mountain about the lake would prove to be very interesting botanical ground, as indeed it was. Owing to the time required for traveling by team, however, only a comparatively short time could be devoted to exploration. The higher parts of the mountain were covered with a dense undergrowth. Considerable swampy ground, however, yielded some interesting finds, among which were noted: *Acer carolinianum* Walt., *Achroanthes unifolia* (Michx.) Raf., *Anchistea virginica* (L.) Presl, *Betula alleghaniensis* Britton, *Carex trisperma* Dewey, *Castalia odorata* L. (small form), *Coptis trifolia* (L.) Salisb., *Cornus canadensis* L., a short-leaved form of *Gaylussacia baccata* (Wang.) K. Koch, *Gymnadeniopsis clavellata* (Michx.) Rydb., *Ilex bronxensis* Britton, *I. laevigata* (Pursh) A. Gray, *I. verticillata cyclophylla* Robinson, *Ilicioides mucronata* (L.) Britton, *Kalmia angustifolia* L. and *K. glauca* Ait. (side by side), *Limnanthemum lacunosum* (Vent.) Griseb., *Limodorum tuberosum*

L., *Lobelia Dortmanna* L., *Perularia flava* (L.) Rydb., *Pogonia ophioglossoides* (L.) Ker, *Rhodora canadensis* L., and *Salix sericea* Marsh.

Mr. S. Van Pelt presided over this last meeting, which practically ended the Symposium.

Some of the members had left already and others intended to leave on the following day. Several stayed over until Monday and a few stayed several days longer. Those who remained explored the region about Newton more fully. Among the interesting finds not previously noted are these: *Andromeda Polifolia* L. and *Carex limosa* L. found by Mr. Van Pelt, *Rhamnus alnifolia* L'Hér. by Mr. Long, *Triglochin maritima* L. by Dr. Elsie Kupfer, *Trollius laxus* Salisb. by Prof. C. S. Williamson, *Dryopteris Boottii* (Tuckerm.) Underw., *D. cristata* × *marginalis* Dav., and *Filix bulbifera* (L.) Underw. by the writer.

A great many interesting finds are yet in store for the botanist who has the opportunity of spending more time about Newton, where nature is still quite undisturbed in many places. This applies perhaps as well in the case of the zoölogist, as the many fearless chipmunks and numerous birds and other wild animals testify. Most of us were too much intent upon noting the plants to make records of the wild animals seen, except in the case of the birds. These were noted by Mrs. H. A. DeCoster, who made a list of them.

It is expected that the next Symposium will be held at Townsend, Delaware, or somewhere on the Delaware peninsula.

PHILIP DOWELL.*

REVIEWS

Jost's Lectures on Plant Physiology

The anxiously awaited English edition† of Jost's Vorlesungen über Pflanzenphysiologie has appeared. That Professor Gibson has done admirably as a translator is certain. As the preface ex-

* I am indebted to the recorder, Mr. Joseph Crawford, for many of the data given.

† Jost, Ludwig. Lectures on Plant Physiology. Authorized English translation by R. J. Harvey Gibson. 8vo. Pp. i-xiv + 1-564. f. 1-172. 1907. Oxford, at the Clarendon Press. Cloth, 21 s., net; half morocco, 24 s., net.